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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/172,533 10/14/98 GOOSEY

M 50278

EXAMINER

IM62/0216

PETER F CORLESS
P O BOX 556
MARLBOROUGH MA 01752

TALBOT, B

ART UNIT

PAPER NUMBER

1762

DATE MAILED:

02/16/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/172,533

Applicant(s)

GOOSEY ET AL.

Examiner

Brian K Talbot

Art Unit

1762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- 1) ☒ Responsive to communication(s) filed on 15 June 1999.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) 7-9, 12 and 13 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-6, 10 and 11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some * c) ☐ None of the CERTIFIED copies of the priority documents have been:
1. ☐ received.
2. ☐ received in Application No. (Series Code / Serial Number) _____.
3. ☐ received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

Attachment(s)

- 14) ☒ Notice of References Cited (PTO-892)
- 15) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 16) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5,6.
- 17) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 18) ☐ Notice of Informal Patent Application (PTO-152)
- 19) ☐ Other: _____.

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1. The claims 1-13 remain in the application.
2. Claims 7-9, 12 and 13 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from any other multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claims 7-9, 12 and 13 have not been further treated on the merits.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The Examiner questions how the reactive hydroxyl species are “generated” when they are used to etch the substrate. The Examiner questions whether the term should have recited “hydroxyl radicals”. Clarification is requested.

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Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1,4,6,10 and 11 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Feldstein (4,321,285).

Feldstein (4,321,285) teaches electroless plating whereby metallic surfaces are imparted to a non-conductive or dielectric substrate by an electroless coating process comprising coating the surface of the substrate with a hydrous oxide colloid of non-precious metal ions, such as cobalt, nickel, etc., reducing the selected metal ions to a reduced or zero valence state with a reducing agent and subsequently exposing the substrate to an electroless plating solution to form a metal layer (abstract). The reducing agent can include a borane or hydride. The electroless coating can be copper (col. 5, line 8 – col. 6, line 25).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2,3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Feldstein (4,321,285).

Features described above are incorporated here.

Feldstein (4,321,285) fails to teach etching with a reactive hydroxyl species.

While the Examiner acknowledges this fact, Feldstein (4,321,285) teaches that the substrate is "previously etched with the hydrous oxide colloid" (col. 5, line 28). Hence the substrate is "treated" to accept the catalytic species which is subsequently reduced and plated. It is the Examiner's position that one skilled in the art would have had a reasonable expectation of achieving similar success regardless of how the non-conductive substrate is "etched" prior to contacting with the catalyst solution. If applicant disagrees, applicant is invited to supply a showing of unexpected results regarding this technical feature.

6. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Feldstein (4,321,285) in combination with Giesecke (4,568,570).

Features described above are incorporated here.

Feldstein (4,321,285) fails to teach silver as the "catalyst".

Giesecke (4,568,570) teaches using silver as an activating catalyst for electroless plating.

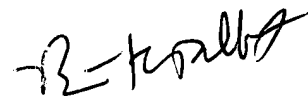
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Therefore, it would have been obvious at the time the invention was made to have modified Feldstein (4,321,285) process by utilizing silver as the "catalyst" as evidenced by Giesecke (4,568,570) because of the expectation of achieving similar success regardless of the catalyst utilized.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian K Talbot whose telephone number is (703) 305-3775. The examiner can normally be reached on Tuesday-Friday 7AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shrive P Beck can be reached on (703) 308-2333. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-6078 for regular communications and (703) 305-6357 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3775.


Brian K Talbot
Primary Examiner
Art Unit 1762

BKT
February 10, 2000